

## ABSTRACT

Methods and systems for processing data packets enable a communication device having limited memory to participate in network protocols. One communicating device formats packets in accordance with the specifications of one or two or more communication protocols, with one or more additional constraints, and transmits it to an other communication device. The other communication device performs a specified processing of the received packet to generate a reply packet in response to the received packet, which conforms to the one of two or more communication protocols, while also satisfying one or more additional formatting constraints.